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*Barriers* TO IMPLEMENTING  
*College* AND *Workforce Readiness*  
INITIATIVES IN TEXAS

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Texas Association of School Boards

The mission of the Texas Association of School Boards (TASB) is to promote educational excellence for Texas schoolchildren through advocacy, visionary leadership, and high-quality services to school districts.

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## BACKGROUND

In 2007, the Bill & Melinda Gates Foundation awarded a grant to the Texas Association of School Boards (TASB) to conduct a study of the legal, regulatory, and practical barriers to college and workforce readiness in Texas and prepare a report to guide state and district policymakers in improving educational services for all students. The interest of the Gates Foundation is directly linked to the foundation's national effort to improve high school graduation and college readiness rates. The foundation believes all students deserve to graduate high school with the skills and knowledge that prepare them for college, career, and life.

TASB compiled and reviewed legal, regulatory, and policy documents bearing on preparation for college and the workforce in Texas high schools. The Texas Center for Educational Research conducted more than 40 interviews of policymakers, practitioners, and education leaders in the state to learn how implementation of law and policy in Texas schools supports or thwarts students as they prepare for college or the workforce.

This report combines the findings from the legal and policy review and the observations and experiences of policymakers and practitioners. It focuses on key barriers that now present themselves and offers constructive ideas about overcoming those barriers.



## INTRODUCTION

For many years, Texas has focused on improving the preparation of high school students by raising the standards for graduation and course completion and also increasing rigor in courses. Efforts are currently under way to incorporate college-ready standards into the Texas Essential Knowledge and Skills (TEKS).

What has driven these efforts is a set of alarming statistics about the number of students who graduate from high school poorly prepared for postsecondary education and in need of remediation or developmental education when they reach college. Statistics of particular interest include the following:

- Half of all college freshmen are likely to struggle with the reading demands of their college courses.<sup>1</sup>
- Only 35 percent of Texas high school graduates in 2006 met the new college readiness standards for both English language arts and mathematics.<sup>2</sup>
- More than half of the students entering Texas public colleges and universities require some academic remediation.<sup>3</sup>

Texas employers and Texas Workforce Commission officials report that young employees are not well prepared for the workplace in terms of their skills and knowledge. This and other evidence makes it clear that Texas must do more to prepare students for college and the workforce. One step in that process is to assess the barriers to strong preparation and consider practical solutions to lower or eliminate them.

This report is a culmination of three research and analysis efforts aimed at assessing the barriers to college and workforce readiness in Texas public schools. The first step was an examination of the laws and rules enacted between 2003 and 2008 that are intended to improve the preparation of students for study and work after high school. Next was an analysis of policies that influence lawmakers and educators as they seek to improve high school for all students. Finally, a comprehensive set of interviews was conducted with policymakers, higher education and public education administrators, business representatives, and educators to learn about the challenges of and opportunities for improving the preparation of Texas students for college and the workforce.

<sup>1</sup>ACT, 2005 ACT National and State Scores. Available at <http://www.act.org/news/data/05/index.html>.

<sup>2</sup>Texas Education Agency, Academic Excellence Indicator System. Indicator: College-Ready Graduates, 2006. Available at <http://www.tea.state.tx.us/perfreport/aeis/2007/index.html>.

<sup>3</sup>Texas Legislative Budget Board, *Public High School to College Transitions: Barriers and Best Practices*, Texas School Performance Review, 2008, p. 3. Available at [http://www.lbb.state.tx.us/Perf\\_Rvw\\_PubEd/White\\_Papers/Higher\\_Ed\\_Continuum.pdf](http://www.lbb.state.tx.us/Perf_Rvw_PubEd/White_Papers/Higher_Ed_Continuum.pdf).

## LAWNS TO IMPROVE THE PREPARATION OF TEXAS HIGH SCHOOL STUDENTS

The 78th Legislative Session (2003) marked the beginning of an era that has focused intensively on improving public high school education. In many ways, Texas is a leading state in terms of improving the rigor of high school education and measuring student performance as a spur to further improvements. Legislators have enacted the following new programs, assessments, collaborative leadership efforts, accountability measures, and grant programs aimed at improving postsecondary readiness:

### TEXAS HIGH SCHOOL PROJECT (2003)

The Texas Legislature joined with the Bill & Melinda Gates Foundation and the Michael and Susan Dell Foundation to create a \$216 million public-private initiative aimed at improving Texas high schools in order to increase graduation rates, as well as the number of students prepared for college and career success. The partnership, called Texas High School Project (THSP), focuses its efforts on high-need

schools and districts statewide, with an emphasis on urban areas and the Texas-Mexico border. The multi-part THSP strategy includes high school redesign, development of new models for high schools, capacity-building for regional education service centers, new approaches to educator recruitment, school board leadership development, classroom programs, educator certification, and professional development.<sup>4</sup>

### P-16 COUNCIL (2003)

The Texas Legislature amended the laws related to the P-16 Council.<sup>5</sup> "P-16" refers to a systemwide initiative encompassing pre-kindergarten (P) through four-year college programs (16). The Texas P-16 Council must ensure that long-range plans and educational programs complement the entire system of public education. In 2006, the Legislature called for a P-16 College Readiness and Success Strategic Action Plan that must include definitions of the standards for college readiness, a description of the components of a P-16 individual graduation plan sufficient to prepare students

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<sup>4</sup> Texas High School Project. Available at [http://www.thsp.org/about\\_us/](http://www.thsp.org/about_us/).

<sup>5</sup> The Texas Legislature formalized the system by creating the P-16 Council as defined in Sections 61.076 and 61.077 of the Texas Education Code. In 2005, the Legislature modified and strengthened Section 61.076 and repealed Section 61.077. The commissioner of higher education and the commissioner of education co-chair the Council, which meets quarterly.

for college success, recommended strategies for decreasing the number of students in developmental education, and recommended changes to teacher certification and professional development to assist public schools in preparing students for college.<sup>6</sup>

### EARLY COLLEGE HIGH SCHOOLS (2003, 2006)

Senate Bill 976 (2003) created a middle-college education pilot program that was renamed the “early college education program” in 2006. The statute required the commissioner of education to establish and administer an early college education program for students at risk of dropping out or students who wish to accelerate completion of high school. The P–16 Council must provide guidance, and the commissioner of education must consult the Texas Higher Education Coordinating Board (THECB) in administering the program.<sup>7</sup>

### VERTICAL TEAMS, COLLEGE CREDIT, “4X4,” COLLEGE PLACEMENT EXAMS, AND THE HIGH SCHOOL ALLOTMENT (2006)

A broad effort to assist students in making the transition from high school to college was enacted by the 79th Legislature (Third Called Session) in House Bill 1 (HB 1). The legislation, known for its sweeping tax relief and school finance provisions, also included an ambitious effort to improve high school success and college readiness. This law requires the commissioners of education and higher education to establish vertical teams of educators to evaluate current high school requirements and establish college readiness standards in the core subjects (language arts, mathematics, science, and social studies).<sup>8</sup> The college readiness standards are to specify what students must know and be able to do to succeed in entry-level college and university courses. The State Board of Education (SBOE) must incorporate the college readiness standards into the TEKS, the state’s K–12 curriculum standards.

Other major provisions of HB 1 include (1) a requirement that school districts offer students the opportunity to earn at least 12 semester hours of college credit in high school through dual-credit, Advanced Placement (AP), or International Baccalaureate (IB) courses and (2) an increase in the number of math and science course credits required for graduation on the Recommended High School Program (RHSP) and the Distinguished Achievement Program (DAP), starting with students entering 9th grade in fall 2007. The RHSP, currently the default high school graduation program for Texas students, requires four years of science and four years of math (referred

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<sup>6</sup> Texas Education Code § 61.0761.

<sup>7</sup> Texas Education Code § 29.908.

<sup>8</sup> *Texas College Readiness Standards*, January 2008. Available at <http://www.theccb.state.tx.us/collegereadiness/CRS.pdf>.

to as “4x4”). In recognition of the additional responsibilities these laws imposed on high schools, the Legislature provided a \$275-per-student “High School Allotment” for each student in grades 9 through 12.<sup>9</sup>

### COMMISSION FOR A COLLEGE READY TEXAS (2007)

During the 80th Legislative Session, Governor Rick Perry created the Commission for a College Ready Texas (CCRT) to provide expert resources and support for the vertical teams and the SBOE. This 21-person commission was supported by the commissioners of education and higher education and the eight vertical team co-chairs. The commission visited different regions of Texas, gathered information from national experts, and sought assistance from researchers. The culmination of its efforts was a report issued November 2007 that established a definition of college and workforce readiness in Texas.<sup>10</sup>



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### END-OF-COURSE EXAMS, COLLEGE READINESS QUESTIONS (2007)

By passing Senate Bill 1031 (SB 1031), the 80th Legislature required students to pass an end-of-course test in 12 high school courses in the foundation curriculum.<sup>11</sup> A portion of the test questions are to be used by higher education institutions to determine if a student is ready to enroll in freshman-level courses. The SBOE must establish a level of performance that indicates college readiness. The Texas Education Agency (TEA) was required to develop, by June 1, 2008, a vertical scale to assess performance and allow comparison of a student on assessment instruments from one grade level to the next. The legislation also required districts to administer a nationally norm-referenced college preparation assessment to students in 8th grade (to diagnose academic strengths and weaknesses before high school), in 10th grade (to assess readiness for college or the workplace), and in 11th or 12th grades (to be used in college admission decisions). This mandate was not implemented because state funding was not appropriated.

<sup>9</sup> HB 1 (2006) provisions related to public and higher education can be found in summary form at <http://www.theccb.state.tx.us/CollegeReadiness/HB1Summary.pdf>.

<sup>10</sup> *The Report of the Commission for a College Ready Texas*, November 2007. Available at <http://www.collegereadytexas.org/>.

<sup>11</sup> SB 1031 created a high school testing program with 12 end-of-course exams and contains language that is similar or complementary to HB 2237.

## DROPOUT PREVENTION AND RECOVERY PROGRAMS (2007)

The 80th Legislature also passed House Bill 2237 (HB 2237), amending existing law to require personal graduation plans for all students who fail a portion of the state tests or are judged not likely to graduate from high school within a five-year period.<sup>12</sup> Because dropping out of high school makes preparation for college or the workforce extremely difficult, the bill provides resources to help schools address the dropout problem, including an online Best Practices Clearinghouse for dropout prevention and numerous grant programs intended to support dropout prevention and recovery programs. School districts with high dropout rates are required to develop dropout prevention plans.



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HB 2237 also created the High School Completion and Success Initiative Council (HSCSI Council), composed of nine members that include the commissioners of education (presiding officer) and higher education, to improve the effectiveness, coordination, and alignment of high school completion and college and workforce readiness efforts.<sup>13</sup> The legislation required the HSCSI Council to adopt a strategic plan to guide the disbursement of funds appropriated for high school reform, college readiness, and dropout prevention, including several of the grant programs. In March 2008, the HSCSI Council adopted its strategic plan.

## MORE RIGOROUS COLLEGE ADMISSIONS REQUIREMENTS (2007)

House Bill 3826 made requirements for admission to public higher education institutions more uniform as well as more challenging. High school students must graduate on the RHSP or DAP, earn 1,500 out of 2,400 on the SAT, or meet the “benchmark” scores on the ACT exams in order to gain admission into a Texas public university.

<sup>12</sup>HB 2237 amended Texas Education Code § 28.0212.

<sup>13</sup>Texas High School Completion and Success Initiative Council, *Strategic Plan*. Available at [http://www.tea.state.tx.us/ed\\_init/thscsic/StrategicPlan\\_ApprovedFINAL.pdf](http://www.tea.state.tx.us/ed_init/thscsic/StrategicPlan_ApprovedFINAL.pdf).

## UNIFORM GPA METHODOLOGY (2007)

House Bill 385 I required the commissioner of higher education to establish a standard grade point average (GPA) calculation. The purpose of this legislation was to standardize the determination of high school class rankings for purposes of college admissions. All Texas school districts must use the uniform GPA method to determine high school class rankings.

These legislative initiatives to improve the rigor of high school education through demanding curricula, the introduction of college-level academic work at the high school level, and the integration of standards that facilitate a seamless transition from high school to college in core courses set the stage for development of a definition of “college and workforce readiness.”

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## DEFINING COLLEGE AND WORKFORCE READINESS

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Texas does not have an official definition of “readiness.” State agencies use various indicators of readiness, including: the percent of students completing the RHSP or the DAP; scores on college entrance examinations; scores on AP and IB tests; scores on the Texas Assessment of Knowledge and Skills (TAKS) exit-level test; scores on college placement exams, such as the Texas Higher Education Assessment (THEA); and a college-readiness indicator in the Academic Excellence Indicator System (AEIS).<sup>14</sup>

In its November 2007 report, the CCRT defined college readiness as “the attainment of the core knowledge and skills necessary to succeed in the first year of education after high school without the need for remedial/developmental education.”<sup>15</sup> The report added that “the essential knowledge and skills required for postsecondary readiness, no matter what option is chosen, are the same,”<sup>16</sup> thus folding workforce readiness and other options into the definition.

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Similarly, the HSCSI Council concluded that “the knowledge and skills necessary for a high school graduate to succeed in college are the same as those required to enter workforce training for a skilled position” and emphasized that “all students should be prepared for postsecondary success with the same level and degree of rigor.”<sup>17</sup> The HSCSI Council defines “postsecondary success” as “the range of academic, workforce, and social proficiency that high school students should acquire to successfully transition into: skilled employment, advanced training in the military, an associate’s degree, a bachelor’s degree, or technical certification.” The HSCSI Council *Strategic Plan* includes a long-term indicator and six interim indicators to permit Texas to measure performance against the definition.<sup>18</sup>

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<sup>14</sup>Texas Legislative Budget Board, *Public High School to College Transitions*, p. 11.

<sup>15</sup>*Report of the Commission for a College Ready Texas*, November 2007, p. 2.

<sup>16</sup>*Ibid.*, p. 3.

<sup>17</sup>Texas High School Completion and Success Initiative Council, *Strategic Plan*, March 11, 2008, p. 7.

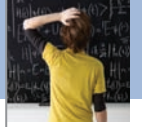
<sup>18</sup>*Ibid.*, pp. 23-24.

TEA uses the HSCSI Council's definition to guide its work. THECB, upon adopting the Texas College Readiness Standards in January 2008, acknowledged that students must be able to complete the first year of college successfully without taking remedial or developmental education and must be able to meet the demands of the workforce, but THECB did not adopt a formal definition.<sup>19</sup>

While all stakeholders agree that every student should receive rigorous preparation for whatever comes after high school, opinions differ about whether preparation for college and preparation for the workforce should be the same or differentiated.<sup>20</sup> By the end of 2008, however, state leaders had chosen a policy direction that equated college preparation with workforce preparation in terms of fundamental

knowledge and skills, as well as rigor of coursework. From the policy and legislative efforts to date, the operational definition of "college and workforce readiness" that has emerged in Texas is "the level of preparation a student needs in order to enroll and succeed—without remediation—in a credit bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program."<sup>21</sup>

The policy direction in Texas reflects the state of policy development nationwide. Several national organizations and affiliated research groups believe that college preparation standards should be the norm if all students are to be successful after high school.<sup>22</sup> These groups and others frame the basic definition as the knowledge and skills to succeed in entry-level college coursework without remediation.



<sup>19</sup>See [www.theccb.state.tx.us/collegereadiness/TCRS.cfm](http://www.theccb.state.tx.us/collegereadiness/TCRS.cfm).

<sup>20</sup>Chris Patterson, *Career and Technology Education: Many Paths, Equal Rigor and One Destination for Texas High Schools*, Policy Series, Issue 9, prepared for the Texas Institute for Education Reform, September 2008, pp. 7-10.

<sup>21</sup>David T. Conley, *Toward a More Comprehensive Conception of College Readiness*, Educational Policy Improvement Center, March 2007, p. 5.

<sup>22</sup>Achieve, Inc., *Policy Brief*, December 2007, p. 1. Available at [www.achieve.org/node/980](http://www.achieve.org/node/980). See also the Alliance for Excellent Education, a national policy and advocacy organization dedicated to the goal of every child graduating from high school prepared for college, work, and citizenship. Available at [www.all4ed.org](http://www.all4ed.org).

## MEASURING COLLEGE AND WORKFORCE READINESS


Given the prevailing definitions of college and workforce readiness in Texas—definitions consistent with national statements—how can such readiness be measured? Important measures most likely include the following:

- high school dropout rates
- high school graduation and completion rates
- high school course taking
- test-based readiness standards
- college-going rates
- remediation rates

The performance of Texas students on each of those measures follows:

### HIGH SCHOOL DROPOUT RATES

Texas measures dropouts according to the definition used by the National Center for Education Statistics. According to TEA, the annual 2006–07 dropout rate for students attending grades 7–12 was 2.7 percent, and the grade 9–12 dropout rate was 3.9 percent. The grade 9–12 dropout rate for African American students was 4.1 percent, the dropout rate for Hispanic students was 3.7 percent, and the dropout rate for whites was 1.3 percent. Most of the students who dropped out in 2006–07 were high school seniors. Overage students made up three-quarters of the grade 7–12 dropouts.<sup>23</sup>



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Annual dropout rates may appear modest, but longitudinal dropout rates show the percentage of students from the same high school class who drop out before graduating, and the rates are higher. The longitudinal dropout rate for the class that began 9th grade in 2003–04 and graduated in 2006–07 was 11.4 percent.<sup>24</sup>

<sup>23</sup>Texas Education Agency, *Secondary School Completion and Dropouts in Texas Public Schools, 2006-07*. Austin, TX, August 2008, p. x.

<sup>24</sup>Ibid., p. ix.

## HIGH SCHOOL GRADUATION AND COMPLETION RATES

According to the U.S. Department of Education, 74 percent of students who began as Texas high school freshmen in 2002 graduated in 2006. According to the Education Trust, an independent research and policy group, the Texas state-reported graduation rate for the class of 2006 is somewhat higher, at 84 percent. Graduation rates vary considerably across student populations. In Texas, Asian Americans have the highest high school graduation rate, at 92.7 percent. White students have an 89.5 percent rate, African American students have an 81.7 percent rate, and Hispanic students have a 77.4 percent rate.<sup>25</sup>

The completion rate is the percentage of students from a class of beginning 9th grade students (or 7th grade students) who graduate by the anticipated graduation date or are continuing in high school.<sup>26</sup> The annual 2006 completion rate for grades 9–12 was 88.9 percent. The rate in 2007 was 86.7 percent.<sup>27</sup>

Longitudinal data for the class that began 9th grade in 2003–04 and graduated in 2006–07 reveal that 78.0 percent of the class graduated on time, 2.0 percent received certificates of high school equivalency or GEDs, and 8.7 percent remained in high school for a fifth year.<sup>28</sup> Some observers believe that the state's methods for calculating dropout and completion rates understate the dropout problem. The Intercultural Development Research Association in San Antonio estimates that the high school attrition rate (a longitudinal dropout rate developed by that organization) for 2006–07 was 34 percent, suggesting that about two-thirds of high school students in the 2007 cohort graduate with a diploma, compared to the state rate of 86.7 percent.<sup>29</sup>

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<sup>25</sup>Daria Hall, *Graduation Matters: Improving Accountability for High School Graduation*, The Education Trust, August 2007, p. 10.

<sup>26</sup>The completion data reported here do not include students who earned a GED in the group of “completers.”

<sup>27</sup>Hall, *Graduation Matters*, p. 56.

<sup>28</sup>Ibid., p. ix.

<sup>29</sup>Intercultural Development Research Association. Available at [http://www.idra.org/Research/IDRA\\_Research](http://www.idra.org/Research/IDRA_Research).

## HIGH SCHOOL COURSE TAKING

The most important predictor of college success for an individual student is the degree of rigor of the high school curriculum. Research conducted by the U. S. Department of Education verifies that academic intensity of the high school courses a student takes count for more than anything else in college preparation. A rigorous course of study also improves the likelihood of completing a four-year degree. The highest level of mathematics reached in high school continues to be a key for college readiness: students who take math beyond Algebra 2 are more likely to successfully complete college.<sup>30</sup>



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Until recently, students had a choice between three diploma programs in Texas, and many students graduated on the minimum program. The more rigorous RHSP and DAP required 24 credits to graduate, including three years each of math and science. For the 2005–06 school year, 75.7 percent of students graduated on the RHSP or DAP. Fewer African American students (67.8 percent) graduated having completed one of these rigorous courses of study.

As a result of requirements set out in HB 1 (2006), the RHSP became the default graduation plan in the state beginning with the 2007–08 school year. That legislation also increased the rigor of both the RHSP and the DAP, requiring 26 course credits for graduation, including four years each of mathematics and science.

## TEST-BASED READINESS STANDARDS

According to ACT (formerly called the American College Testing Program), many Texas students are not prepared for college study. Of the graduates tested in 2008, 63 percent were ready for English composition, 44 percent for college algebra, 49 percent for college social sciences, and 25 percent for college biology. According to ACT, only 20 percent of 2008 test takers were prepared for college work in all four subject areas, given that organization's definition of preparation.<sup>31</sup> Texas has set its own college readiness benchmark for ACT test performance. In 2006, just over one-quarter of test takers (27.1 percent) performed at or above the benchmark criteria.<sup>32</sup>

<sup>30</sup>Clifford Adelman, *The Toolbox Revisited: Paths to Degree Completion from High School through College*. U.S. Department of Education, 2006. Available at <http://www.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf>.

<sup>31</sup>ACT, *2008 ACT National and State Scores*. Available at <http://www.act.org/news/data/08/map/index.html>.

<sup>32</sup>Texas Education Agency, *Academic Excellence Indicator Report, 2007*. Available at <http://www.tea.state.tx.us/perfreport/aeis/2007/state.html>.

Texas reports several measures of postsecondary readiness in the AEIS. The most recent data available are for the class of 2006. In that class, 21 percent of students took an advanced or dual-enrollment course. Nearly 20 percent (18.9 percent) of the class took an AP or IB test. Of these test takers, 47.2 percent met the state's criteria for strong performance, which is a score that would be likely to earn advanced course placement, college credit, or both upon entering college. Nearly two-thirds of the class of 2006 (65.5 percent) took the SAT test, but only 27.1 percent scored at or above the state criteria. And, according to the state's unique test-based college indicators reported through AEIS, in 2006, 48 percent of high school graduates were judged to be ready for college English, 52 percent for mathematics, and 35 percent for college study in both subjects.<sup>33</sup>

The THECB also reports test-based college readiness indicators. Although the percentage of Texas students meeting THECB's college readiness standards in English language arts (ELA) and mathematics increased over the last four years (2004 to 2007), it is still low: 52 percent of the students met ELA standards and 53 percent met mathematics standards, but only 38 percent met the standards in both areas (an increase from 20 percent in 2004). The percentage of minority students meeting THECB standards in both areas was even lower: only 20 percent of African American students and 27 percent of Hispanic students, compared with 50 percent of white students.<sup>34</sup>

## COLLEGE-GOING RATES

Texas college-going rates are among the lowest in the nation; Texas ranks 41st among the 50 states and the District of Columbia. The estimated rate of high school graduates going to college in Texas is 51.9 percent (for 2004), while the national average is 56.1 percent. Of college entrants, 46.3 percent attend a college in Texas, compared to the

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<sup>33</sup>Ibid.

<sup>34</sup>Barbara Knaggs and Jan Lindsey, "High School Completion and Success in Texas," Texas Education Agency, December 7, 2007.

rate of 45.4 percent nationally for those who attend a college in their home state.<sup>35</sup> College completion rates are also a concern. In 2006, 51 percent of full-time students graduated from four-year institutions in Texas, compared to 64 percent in the top-ranked states. Fourteen certificates, degrees, and diplomas were conferred per 100 undergraduates at all Texas colleges and universities, compared to 20 in the top states.<sup>36</sup>

The lower college attendance and completion rates in Texas are attributed in part to the fact that college has become less affordable for low-income and middle-income families. Compared with top-performing states, families in Texas have to devote a larger share of income, even after receiving financial aid, to attend public colleges and universities.<sup>37</sup> The 2006 *Measuring Up* State Report Card on Higher Education gave Texas an “F” in the college affordability category.<sup>38</sup>

## REMEDIATION RATES

According to the National Center for Public Policy and Higher Education, about 60 percent of students in public colleges nationally fail to complete a degree within five years. Studies have shown that successful completion of first-year courses is most critical; however, more than 40 percent of students start college by taking remedial courses.<sup>39</sup> Of those who enter four-year colleges, about 20 percent of the students take remedial courses. In community colleges, where 44 percent of all students are enrolled, the number of students taking remedial courses is estimated at 42 percent.<sup>40</sup>

In Texas, the percentages of students enrolled in developmental courses are slightly higher than the national averages. Approximately half of community college freshmen and 22 percent of university freshmen enroll in at least one developmental education course. About 20 percent of those students who complete developmental programs earn a bachelor’s degree within six years.<sup>41</sup> The majority (80 percent) of students taking developmental education courses are in community colleges. Less than one percent of students in developmental education courses are at The University of Texas and Texas A&M, two of Texas’s flagship universities.

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<sup>35</sup>U.S. Department of Education, *Digest of Education Statistics 2007*. Available at [http://nces.ed.gov/programs/digest/d07/tables/dt07\\_194.asp](http://nces.ed.gov/programs/digest/d07/tables/dt07_194.asp).

<sup>36</sup>National Center for Public Policy and Higher Education, *Measuring Up* 2006. Available at <http://measuringup.highereducation.org/>. See the Texas state report.

<sup>37</sup>Ibid.

<sup>38</sup>Ibid.

<sup>39</sup>A Report to the Commission Appointed by Secretary of Education Margaret Spellings, “A Test of Leadership: Charting the Future of U.S. Higher Education,” September 2006.

<sup>40</sup>Patrick M. Callan, et al., “Claiming Common Ground: State Policymaking for Improving College Readiness and Success,” Institute for Educational Leadership, National Center for Public Policy and Higher Education, Stanford Institute for Higher Education Research, March 2006. Available at [http://www.highereducation.org/reports/common\\_ground/index.shtml](http://www.highereducation.org/reports/common_ground/index.shtml).

<sup>41</sup>Texas Legislative Budget Board, *The Cost of Developmental Education in Texas*, Higher Education Performance Review, March 2007. Available at [http://www.lbb.state.tx.us/Higher\\_Education/Cost\\_Developmental\\_Ed\\_TX\\_0407.pdf](http://www.lbb.state.tx.us/Higher_Education/Cost_Developmental_Ed_TX_0407.pdf).

## IMPACT OF RECENT LAWS TO IMPROVE COLLEGE READINESS

Because the Texas legislative initiatives to improve academic standards and graduation rates are relatively new, there is little evidence by which to judge their success at this time. Statewide, student scores on the TAKS exit-level test have generally improved in recent years, though there was a decline in the results between 2006 and 2007. Students taking the exit-level test in 2007 were not recipients of many of the legislatively mandated improvements implemented in recent years, so their test results may be indicators of past problems rather than recent changes.

Additionally, as a result of HB 1 (2006) establishing the RHSP as the default high school program, course enrollments are changing. More students are enrolling in Algebra 2 and other courses that are good predictors of readiness for college, but the ultimate results—college enrollment and preparation for college-level courses—cannot be analyzed for several years.

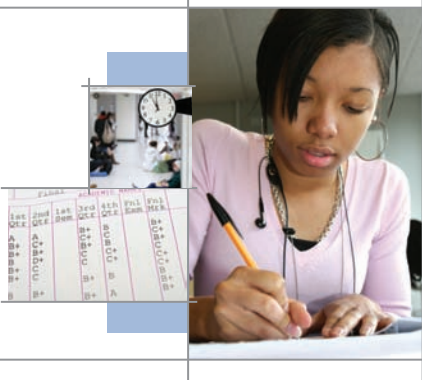


*To measure the effectiveness of our public schools in preparing students for college or the workforce, the state will need to modernize and align the public and higher education data systems...*

Furthermore, to measure the effectiveness of our public schools in preparing students for college or the workforce, the state will need to modernize and align the public and higher education data systems to track information about high school course-taking and completion, high school test scores, college enrollment, and college course success.

## BARRIERS TO COLLEGE AND WORKFORCE READINESS

A key to college readiness is the recognition on the part of both students and teachers that college instruction is different from high school instruction and that the skills college students are expected to use are different from skills students use in high school. In college, students need different learning strategies and coping skills than they used in high school. Not only is the pace of instruction in college quicker than in high school, but instruction has different goals and emphasizes different aspects of material taught. The thinking skills that college instructors are likely to emphasize are different from the thinking skills that students develop in high school. College



*In college, students need different learning strategies and coping skills than they used in high school.*

students are expected to make inferences, draw conclusions, interpret results, analyze conflicting phenomena, support arguments with evidence, solve complex problems, and conduct research. Students are expected to have good writing skills, research capabilities, and thinking skills. Additionally, they are expected to be independent learners, recognize when they are having problems, and seek help as needed.

According to the Educational Policy Improvement Center, successful academic preparation for college is grounded in habits of mind and content knowledge.<sup>42</sup> Key habits of mind consist of analysis, interpretation, precision and accuracy, problem solving, and reasoning. These habits of mind are more important to college success than any specific content knowledge students learn in high school. Similarly important are attitudes and behavioral attributes that students need to demonstrate, such as study skills, time management, awareness of one's performance, and ability to utilize study groups.

The laws and policies implemented to date were intended to help Texas school districts equip students with the knowledge and skills they need to succeed after high school graduation. Following is a summary list of barriers impeding districts from fully realizing the state's goal, as well as suggestions for improvement and further progress.

<sup>42</sup>Educational Policy Improvement Center, *Toward a More Comprehensive Conception of College Readiness*, Eugene, OR, March 2007, pp. 12-14.

## BARRIERS TO TEACHING AND LEARNING

### Limited Course Options for Graduation

To increase the academic preparedness of its high school graduates, Texas implemented a more rigorous high school curriculum and increased graduation standards in 2007–08. Currently, students entering the 9th grade will complete either the RHSP or the DAP. A reduced-credit minimum graduation plan was generally available to high school students prior to the 2007–08 changes, but now agreement from the student's parent or guardian as well as a school counselor or administrator is required for a student to pursue the minimum plan.

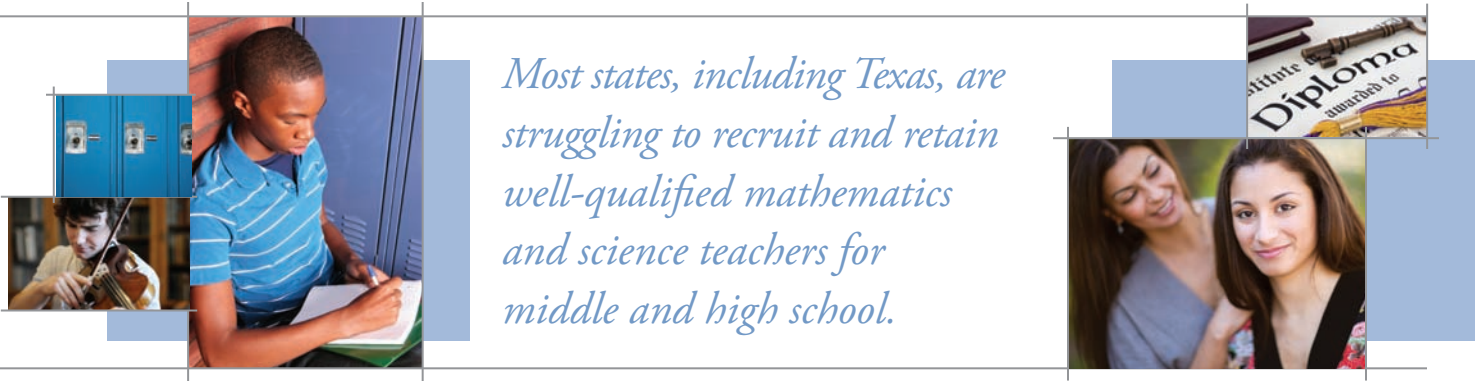
In addition to making the RHSP the default graduation plan, legislators also increased the number of credits required by the RHSP from 24 to 26. The increase in credits reflects the addition of a fourth year of math and a fourth year of science over the three years previously required. According to the higher education commissioner, the additional coursework, particularly in math, will ensure that students are prepared for college because a fourth year of rigorous math is the best predictor of success in higher education. When interviewed, the commissioner commented that “a fourth year of math teaches critical thinking skills, skills in logic, higher order thinking skills in a variety of areas that are indispensable for students who want to perform at the highest levels of professionalism.”

The revised RHSP, with its requirement of four years of math, science, English language arts, and social studies coursework (the 4x4 plan), has generated controversy and resistance. The main objection to 4x4 is that it imposes a single college preparatory curriculum on all students instead of offering multiple options. Additionally, counselors and school administrators believe the requirements may make it difficult for students to schedule desired elective courses such as fine arts and career and technology education (CTE) in a crowded course schedule. Some observers believe that the standards of the 4x4 RHSP may prompt some students to take the minimum graduation plan instead.

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### SOLUTION

The Texas Legislature, SBOE, and school districts should make CTE courses more accessible to students within the RHSP. TEA is already leading an effort to redesign CTE courses so that rigorous instruction in core content subject areas is integrated into the applied learning context of CTE. Support for this effort should continue. Recommendations on such courses are due to the SBOE in 2009, and implementation of the revised CTE curriculum is expected in 2010. Until that time, proponents of CTE advise districts to think creatively about how to organize the school day to include more class periods that will enable more coursework.



*Most states, including Texas, are struggling to recruit and retain well-qualified mathematics and science teachers for middle and high school.*

### SOLUTION

Implementing revised courses that simultaneously meet academic and CTE requirements may necessitate an investment in additional teacher professional development by school districts and more flexibility in teacher certification standards.

### SOLUTION

TEA should spotlight academically rigorous workforce and P-16 aligned CTE programs through the state's Best Practices Clearinghouse. Many policymakers hold the view that CTE is less rigorous than non-CTE programs and that students are "tracked" into them. Spotlighting academically rigorous and aligned CTE programs may help offset this view.

## SOLUTION

Texas policymakers may want to study expansion of the RHSP to include three routes to graduation. One route would be the 4x4 RHSP in current law. A second route would include all elements of the RHSP but would exchange the fourth year of mathematics and science with CTE courses. A third route would be to replace the fourth year of mathematics and science with fine arts classes.



## **Lack of Qualified Math and Science Teachers**

To fulfill the new RHSP requirements, school districts need to hire additional math and science teachers. Most states, including Texas, are struggling to recruit and retain well-qualified mathematics and science teachers for middle and high school. The new 4x4 curriculum may even aggravate the teacher shortage if teachers must complete more requirements or coursework to teach high school math and science. Initially, fewer teachers may be qualified to teach the additional courses. Among individuals interviewed for this project, there was general agreement that teacher preparation is a critical component for implementing a rigorous curriculum. There was also a shared concern among many interview subjects that the system of teacher preparation and recruitment should be overhauled, particularly alternative certification programs.

## SOLUTION

Improvements in pre-service preparation (in traditional and alternative certification programs), as well as professional development for certified teachers, will help ease the shortage. The Legislature should make state funding available for these purposes.

## SOLUTION

Institutions of higher education should increase the number of faculty with relevant public school experience who work in teacher preparation programs. Also, teacher preparation courses should be included as a component of content-area choice options. In most undergraduate teacher education programs, students complete coursework in the college's disciplinary departments, while pedagogy is learned in the college of education. A lack of coordination between the two may negatively affect a future teacher's preparedness.

### SOLUTION

The state should analyze data showing the impact of stipends for hard-to-teach schools and stipends for teachers working in shortage areas. This information is critical in understanding how to expand the pool of highly qualified math and science teachers. The Legislature should provide districts with funding for stipends and differentiated pay structures.

### SOLUTION

New models for structuring both teacher and student time are necessary. Districts should have resources available to give teachers time to plan, implement new models, and support struggling students. Fiscal resources are needed to pay for more teacher time involved in learning new skills, planning, and collaborating. Schools must upgrade technology for instruction and ongoing professional development for teachers.

## Disparate Access to Advanced and Dual-credit Courses

Schools can infuse rigor into the curriculum through partnerships with higher education institutions to offer dual-credit courses. However, schools without a college nearby are at a disadvantage with respect to offering dual-credit courses. Even those with a potential partner institution struggle with the mechanics of enrollment and course scheduling, particularly if institutions are not close by.

### SOLUTION

Implementation of the Texas virtual school network will make it easier for many school districts to offer more rigorous courses and dual-credit opportunities. While the Texas Legislature authorized TEA to create the virtual school network in 2007, it failed to appropriate the necessary funding. The 81st Legislature should appropriate sufficient funding to allow TEA to implement the virtual school network beginning with the 2009–10 school year.

### Uniform School Start Date

In 2006, the Texas Legislature prohibited school districts from beginning the school year before the fourth Monday in August, unless the district operates a year-round system. As a result, most districts were forced to start school later in August than they had previously, thus reducing the number of instructional days available prior to the administration of the state tests. In order to ensure that fall semester exams cover three six-week periods, some districts have to administer fall end-of-semester exams after the winter break. Consequently, teachers spend several days after the winter break going over fall semester coursework, which further limits the days available for instruction prior to the administration of TAKS tests during the spring semester.

#### SOLUTION

The Legislature should repeal legislation requiring a uniform school start date for public schools so that districts can begin the school year earlier in August in order to maximize the number of days of instruction available to students prior to the state tests.

### P-16 ALIGNMENT BARRIERS

#### Variable College Admission and Placement Standards

Community colleges and universities require different college placement exams and are free to set the scores required for admission on those placement exams. Many more students could avoid having to take remedial courses in college if they had a clear understanding of what they need to learn in high school to enroll directly in credit-bearing college courses.

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Students must pass sections of a TSI-required college placement exam in order to qualify for dual-credit coursework. Colleges may choose to use the THEA, ASSET, COMPASS, or ACCUPLACER test, each of which covers different content. In addition, colleges may establish their own qualifying scores for entrance into dual-credit classes. High school administrators note that the lack of a uniform system of college placement testing and examination standards makes it difficult for them to know how to prepare students.

#### SOLUTION

Higher education institutions should communicate clear, uniform policies about high school course prerequisites to students who plan to enter and succeed in credit-bearing freshman courses.

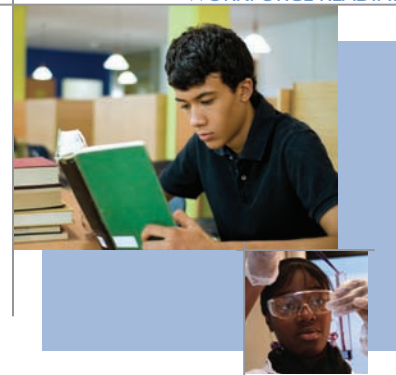
#### SOLUTION

A single college placement examination should be created for use in Texas colleges and degree-granting institutions. The presence of multiple placement examinations is inefficient and creates confusion for teachers and the students they are preparing. A uniform college placement exam and admission score on that exam would allow high school students to more appropriately plan their high school course schedules and avoid the expense and time lost to remedial coursework in college.

### **Lack of Uniformity in Awarding Dual Credit**

Dual-credit coursework permits high school students to take college-level courses that also fulfill high school requirements. Dual-credit courses may be taught at the high school by a teacher with the appropriate credentials or on the campus of a college or university by regular faculty. The courses also may be offered through distance learning and on-line coursework. In order to enroll in dual-credit courses, students must demonstrate preparedness for college-level work by passing an assessment in reading, writing, or math that satisfies the requirements of the Texas Success Initiative (TSI). Students who successfully complete dual-credit courses receive both high school and college credit.

While dual-credit courses provide valuable opportunities for students to gain college credit in high school, high school and college administrators note that simply taking dual-credit courses does not ensure that students will actually receive college credit. There are too many circumstances in which students who earn dual credit are served well only if they attend the college that awarded the dual credit. Students may be unable to transfer dual credit earned at a local community college to another community college or a Texas public four-year institution.



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Implementation of dual-credit coursework raises a variety of additional concerns for students, school districts, colleges, and universities, including the following:

- **Lack of standardization in articulation agreements.** A frequently noted barrier to implementing dual-credit coursework is the lack of standardization in articulation agreements between school districts and colleges or universities. Articulation agreements clarify expected course outcomes, course calendars, grading policies, and student enrollment and attendance requirements. In addition, articulation agreements determine the transferability of course credit, how ADA revenue for student seat time is allocated, as well as the responsibility for college tuition and textbook costs. Articulation agreements currently are negotiated between individual school districts and their college or university partners. In regions of the state where there are multiple school districts and community college campuses, articulation agreements must be negotiated individually for each district/community college campus partnership.

- **Concerns about course content.** Districts are often reticent to offer dual-credit courses in TAKS-tested subject areas because of concerns that courses will not sufficiently address TAKS objectives and thus not adequately prepare students to pass the state accountability exams. Colleges and universities, on the other hand, are often reluctant to award transfer credit for dual-credit courses because of concerns that such coursework has not provided sufficient preparation for the higher-level coursework in the subject area. “You will see some watering down, invariably, of these college-level courses,” explained a college administrator interviewed for this report. “You already have people beginning to question whether these are really and truly college-level courses if a high school [student] can do the work.”
- **Risks associated with student failure.** The ability of high school students to be successful in college level coursework is a concern. A high school student who drops or fails a dual-credit course jeopardizes his or her ability to apply for financial aid in the future. In addition, the student’s eligibility for participation in sports programs may be compromised.
- **The use of calculators.** A prevalent barrier to participation in math-based dual-credit coursework is the inconsistency in policies on the use of calculators between TSI-required exams and the TAKS test. High school students are permitted to use calculators for the TAKS test, but calculators are not allowed for college placement assessments.

#### SOLUTION

THECB should create a list of courses for which all community colleges and public universities in Texas will award college credit. These should be included in a standard articulation agreement that colleges and school districts can use when offering dual-credit courses.



### SOLUTION

High schools should counsel students regarding the consequences of failing a dual-credit course and require students and parents to sign a statement indicating that they understand the benefits of dual credit and the consequences of dropping or failing to pass a dual-credit course.

### SOLUTION

The SBOE and THECB should come to agreement on whether students will be permitted to use calculators on math end-of-course exams in high school and TSI placement tests in college.

## STUDENT SUPPORT BARRIERS

### Insufficient Counseling

High school students typically believe that meeting high school graduation requirements will prepare them for college, but higher education faculty and officials identify this as a misconception.<sup>43</sup> Many students lack information on course requirements, placement examinations, admission criteria, workforce requirements and opportunities, and tuition costs. One of the major reasons for this lack of knowledge is that middle and high school students lack sufficient access to appropriately trained college and career counselors.

Texas law requires counselors to advise students and their parents or guardians about the importance of higher education, coursework designed to prepare students for higher education, and financial aid availability and requirements.<sup>44</sup>

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<sup>43</sup>Andrea Venezia, Michael W. Kirst, and Anthony L. Antonio, *Betraying the College Dream: Students' Misconceptions About Preparing for and Attending College*. Stanford, CA, The Bridge Project at the Stanford Institute for Higher Education Research, March 2003. Available at <http://www.stanford.edu/group/bridgeproject/10+Misconceptions.pdf>.

<sup>44</sup>Texas Education Code § 33.007.

The law specifies the information that must be provided to high school freshmen and seniors. There is no similar requirement for workforce and career counseling.

Because of the high ratio of students to counselors and the wide array of counselor responsibilities,<sup>45</sup> counselors do not have time to devote to college readiness issues. In one national study, researchers reported that 74 percent of students reported never having talked to counselors about college.<sup>46</sup> Counselors themselves report they are so busy with scheduling and test administration duties that they have insufficient time to guide students in course selection, much less through the quagmire of college admission and financial aid requirements.

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The head of a research and development institute at The University of Texas System asserted that “the counseling system in [public] schools is just flat-out broken.” Few public school counselors are trained in college advising and college access. Some counselors do not understand financial aid application requirements. Many fail to expand their relationships with higher education institutions and, instead, routinely route students to the same colleges year after year without counseling them on more options.

Finally, the 65 Percent Rule impedes districts from hiring additional guidance counselors. The 65 Percent Rule comprises two indicators in the financial accountability rating system and is an expenditure target for Texas school districts. A district meets that indicator standard if it spends 65 percent or more on “instructional expenditures,” as defined by federal law. The salaries of and expenditures on counselors are not included within the federal definition of “instruction.” Therefore, hiring additional counselors might cause a district’s spending on instruction to fall below 65 percent, thus violating the spending target and jeopardizing the district’s accountability rating.

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<sup>45</sup>Counselors are typically responsible for student scheduling, testing, make-up testing, coordination of meetings with parents, and some disciplinary referrals, in addition to providing transcripts and information for college applicants.

<sup>46</sup>Jennifer Dounay, “Helping Equip Teachers to Answer Students’ Questions on College Knowledge,” Education Commission of the States, *Policy Brief*, April 2007.

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SOLUTION

Legislators should appropriate funding to create a pilot college and career counseling program that would be offered at non-traditional times so that students and parents could get advice and support for college and workforce options.

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SOLUTION

School district administrators should ensure that counselors obtain regular training in college admission and financial aid requirements so they can effectively help students prepare for higher education.

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SOLUTION

School districts should consider creating a position dedicated to college and workforce advising in Texas high schools.

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SOLUTION

Districts should implement strategies aimed to increase the accessibility of guidance counselors, including (1) reducing the administrative burdens on guidance counselors; (2) training middle and high school teachers to provide some college and career guidance; and (3) partnering with community colleges to provide students with greater access to knowledgeable college and financial aid counselors.

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SOLUTION

Policymakers should revise the 65 Percent Rule to allow district expenditures on counselors to be included within the definition of “instructional expenditures.” In this way, districts would have greater budgetary flexibility to hire more counselors.



### Insufficient Support for Low-income and Minority Students

The lack of available, appropriately trained guidance counselors is a particularly acute problem for students who have been historically underrepresented in higher education. These students may not know what questions to ask and, according to opinions of many interview subjects, seem to be more reluctant than other students to seek the assistance of busy guidance counselors. Additionally, parents of these students are less familiar with college admissions and financial aid processes, and thus need guidance and support as well.



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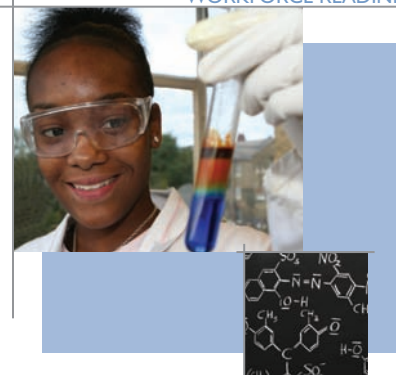
Interview subjects report that language barriers and lack of familiarity with college application processes discourage families from considering college options for their children. As noted in the discussion of college advising, many counselors are poorly prepared to offer such support, and for those who are, overwhelming student-to-counselor ratios and multiple responsibilities may limit their ability to provide assistance.

#### SOLUTION

The state can gain an understanding of what support programs work to increase the college-going rates of underserved students by examining results of the federal Gear-Up program, successful school models such as the KIPP Academy, and other programs with the goal of increasing college admission and completion for minority and low-income students. Such information should be publicized to school districts through TEA's Best Practices Clearinghouse.

## SOLUTION

Schools should develop a culture of high expectations, early awareness of college goals, and a “whatever it takes” attitude. The responses of high school graduates on surveys assessing the factors that support postsecondary success indicate that these components are often missing in high schools. When supports for success are in place, students are more prepared for the challenges of college and the workplace.<sup>47</sup>



## Insufficient and Confusing Financial Aid Programs

The system by which students and their families may apply for financial aid is confusing and complex. Multiple state<sup>48</sup> and federal financial aid programs<sup>49</sup> are available to students in Texas, and the differences among aid options are unclear. In Texas, financial aid resources have not kept pace with tuition increases. For example, the TEXAS Grants have remained flat, but tuition has risen. Texas families spend about 22 percent of their income on community college education and an average of 30 percent on four-year institution tuition.<sup>50</sup> Further, many high school students do not receive notice of financial aid awards until the spring of their senior year, which makes college planning difficult. Financial aid has become more critical for students as the cost of college has increased significantly.

## SOLUTION

Financial aid to Texas students could be improved by consolidating some aid programs, increasing the resources for higher education as well as technical training aid, and making award notification at a time that is most helpful to students.

<sup>47</sup>Hart Research & Public Opinion Strategies, “Rising to the Challenge: Are High School Graduates Prepared for College and Work?” December 2004–January 2005. Available at <http://www.achieve.org/files/poll.ppt>.

<sup>48</sup>See Texas Education Code Chapter 56.

<sup>49</sup>U.S. Department of Education, “Student Aid on the Web.” Available at <http://studentaid.ed.gov/PORTALSWebApp/students/english/index.jsp>.

<sup>50</sup>Texas Legislative Budget Board, *Public High School to College Transitions*, p. 5.

## GOVERNANCE BARRIERS

### Separate Public and Higher Education Systems

The separate governance structures for public and higher education contribute to the lack of curricular alignment, inefficient flow of information, and incomplete and incompatible data systems. Neither system is accountable for the transition from high school to higher education. High school accountability systems are geared toward having students graduate and pass the state TAKS assessment. There are few accountability systems for student performance in higher education and even fewer systems connecting public education to higher education.<sup>51</sup>

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Typically, policymakers' efforts to align the two systems have focused on improving high schools. This may be a practical approach because high school curricula and graduation standards are within legislative reach, but such initiatives address only half of the alignment process and foster systemic mistrust between public and higher education faculty.

### SOLUTION

The state P–16 Council as well as the vertical teams and the CCRT have set the stage for better alignment between the public and higher education systems. More collaborative staff activity across systems through dual-credit courses, regular information sharing, and more accurate and timely feedback will help ameliorate existing problems. The state should support and fund continued alignment projects.

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<sup>51</sup>Andrea Venezia, et al., “The Governance Divide: A Report on a Four-State Study on Improving College Readiness and Success,” National Center for Public Policy and Higher Education, September 2005. Available at [http://www.highereducation.org/reports/governance\\_divide/index.shtml](http://www.highereducation.org/reports/governance_divide/index.shtml).

## SOLUTION

State development of an accountability system for the transition from high school to college will help policymakers identify the initiatives that are working to promote college and workforce readiness.



### Absence of a Longitudinal P–16 Database to Track Students

Once students graduate from high school, school personnel lack the means to track individual students' postsecondary outcomes. Some school administrators say that they have been able to build relationships with regional institutions of higher education that allow them to determine which of their graduates have enrolled, which students require remedial education, and what programs of study individual students choose, but such data are not available to most districts.<sup>52</sup>

Policymakers seeking to improve students' postsecondary outcomes experience similar challenges because it is difficult to assess policy or program effectiveness when it is not possible to track individual students as they move from high schools into higher education or the workforce.

One barrier to tracking students as they move between education systems is the federal Family Educational Rights and Privacy Act (FERPA), which protects individual student education records collected by public schools and institutions of higher education. The intent of FERPA is to limit the ability of educators to disclose student records without parental consent; however, the law allows for data to be disclosed to specified officials without consent if it is to be used "in conjunction with an audit or evaluation of Federal or State supported education programs, or for the enforcement of or compliance with Federal legal requirements which relate to those programs."<sup>53</sup> Officials at TEA and THECB maintain that FERPA prohibits the linking of the two data sets, but some policymakers interviewed for this report say they are reading FERPA too conservatively.

Creation of a longitudinal database to track the characteristics, courses taken, and academic performance of individual students is a challenging task in and of itself. It is made more difficult by disagreement over the effect of FERPA.

<sup>52</sup>THECB provides some of these data aggregated at the school level on its Web site. Aggregate data are useful to understanding overall school outcomes but do not permit educators to examine the effectiveness of programs designed to affect particular students or student groups (e.g., at-risk or low-income students, students who do or do not take AP, etc.).

<sup>53</sup>20 U.S.C. § 1232g; 34 CFR Part 99.

### SOLUTION

TEA and THECB have extensive data on the educational characteristics, choices, and outcomes of individual students, which, if linked, would enable districts to track graduates into public colleges and universities and allow evaluators to assess the effectiveness of policies designed to improve students' college readiness. In addition, the Texas Workforce Commission has employment data, which could provide information on students' workforce outcomes and help measure the effectiveness of educational programs if linked to THECB and TEA databases.<sup>54</sup> The development and maintenance of a statewide P-16 data system will require an ongoing investment by the state.

### SOLUTION

The Texas Legislature should encourage TEA and THECB to work with the U.S. Department of Education to address data issues that create problems under FERPA.

## Cultural Differences Between Public and Higher Education

Lack of collaboration between higher education institutions and high schools has been noted by researchers at the Texas School Performance Review.<sup>55</sup> The tiered structure of the P-16 educational system supports a hierarchical perception of the relative importance of each level of education, which fosters a sense of superiority in some college faculty. "Higher education culture is very elitist," explains the president of the Center for Reform of School Systems and a former university faculty member. Faculty members tend to think in terms of "I'm a historian, they [high school teachers] just teach history." Such attitudes have created barriers to meaningful dialogues between higher education and high school educators. Expressing frustration with local college faculty who decline to participate in curricular alignment discussions and refuse to share information with local high schools, a P-16 Council member interviewed for this report asserted that at the regional level "[the P-16] conversation doesn't exist."

<sup>54</sup>Because the Texas Workforce Commission does not collect individual student education records, FERPA protections do not apply to its data sets.

<sup>55</sup>Texas Legislative Budget Board, *Public High School to College Transitions*, p. 4.

Individuals interviewed for this project identified some elements of the cultural differences:

- **Missing incentives.** The reluctance of college faculty to engage in discussions with high school educators may be furthered by higher education's incentive structures. In particular, higher education does not typically reward faculty for participation in curricular alignment efforts, and work with high schools is not factored into most tenure decisions.
- **Academic freedom.** Efforts to align the P–16 curriculum also may be thwarted by claims of academic freedom on the part of college faculty. Some professors assert that the “curriculum is owned by the faculty” and that the principles of academic freedom guarantee them the right to design their own courses and content. The Texas commissioner of higher education agrees that faculty control over course content works against P–16 alignment goals. He concedes, “It is highly unlikely that you will align the curriculum in universities with anything. The best that we could do is that we could make sure that the general education curriculum is stronger than it is.”
- **Public school bureaucracies.** Several university-level administrators interviewed commented that efforts to improve college readiness and access for high school students may be frustrated by the inability of university staff to penetrate district bureaucracies. A lack of interest or response on the part of district leaders may discourage lower-level public school staff from building relationships with university partners for fear of acting beyond their purview.

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**SOLUTION**

Tenure-based incentives for college faculty to participate in P–16 alignment efforts should be created.

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**SOLUTION**

Standardizing lower-level or freshman-level college coursework is recommended. Faculty designation of lower-level college coursework may reflect individual preferences and areas of expertise. The arbitrary design of lower-level coursework makes it difficult to align the curricula of high schools and undergraduate coursework.

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**Lack of Workforce’s Involvement in Education Reforms**

At the core of efforts to improve academic preparedness of Texas students is the understanding that the state’s economic health depends on the ability of young workers to meet labor market demands. Workforce representatives express concerns about the lack of connection between what is going on in the Texas workforce and the Texas public education system. The representatives worry that public and higher education systems are not adequately preparing students with the knowledge and skills required for important jobs in the trades and in manufacturing. They note that the current emphasis on getting all students into a college academic program may not serve the state well. Trades such as welding, plumbing, heating ventilation and air conditioning (HVAC), and auto mechanics are well paid and in high demand throughout the state. Careers in aircraft maintenance, architecture, construction, transportation, distribution, and logistics have great promise for entry-level workers as well as career employees.<sup>56</sup>

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<sup>56</sup>AchieveTexas profiles numerous careers and related programs of study. Available at [http://www.achievetexas.org/POS\\_Covers.htm](http://www.achievetexas.org/POS_Covers.htm).

The deputy director of Labor Market and Career Information at the Texas Workforce Commission explains that there is little connection between majors offered at four-year institutions and labor market demand, noting that four-year colleges and universities typically focus their efforts on research and the development of “global citizens,” rather than preparing students for the workforce. Business representatives assert that, in general, student interest is detached from labor market realities, as the high number of students who complete degrees in fields such as psychology and sociology (for which there is little labor market demand) demonstrates. Students complete four-year programs of study only to find upon graduation that they lack marketable skills and “need to go back and learn how to do something” in order to get a job. The commissioner of higher education disagrees, noting that most students go to college with the idea of getting a job. There are many students majoring in business, pre-law, and pre-med, all degree programs directly related to career and vocational outcomes.



#### SOLUTION

TEA should involve industry representatives early in the development of TEKS for courses designed to teach students workforce skills. In addition, workforce development representatives should be given a greater role on state and regional P–16 councils to increase the connection between systems of education and the labor market. Policymakers have made strides to include workforce representatives on councils to address P–16 alignment issues; however, their involvement to date has been tertiary.

#### SOLUTION

School districts, community colleges, and universities should align their course offerings more closely with the needs of the local workforce.

SOLUTION

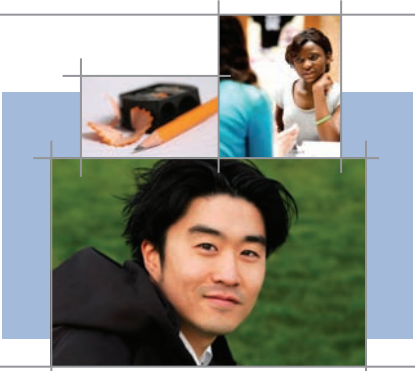
TEA should update the materials developed for AchieveTexas as necessary and disseminate them widely to Texas schools. Counselors should receive training on how to use these materials. AchieveTexas, a state initiative, profiles jobs aligned with the 16 industry clusters that are projected to be the economic development engines for Texas during the next decade and defines coursework prerequisites for those jobs. Many of these jobs do not require an academic degree but do require advanced training.

SOLUTION

Universities should increase career counseling resources to assist college students in better planning for careers and workforce participation.

SOLUTION

The Texas Legislature should increase financial support for students who are pursuing degree programs in high-demand fields.



## CONCLUSION

At the turn of the 19th century, educational reformers Charles W. Eliot and G. Stanley Hall debated the proper curriculum for America's high schools. Eliot advocated that high schools should provide all students with a college preparatory curriculum rich in foreign languages, science, and math, holding that the "intellectual powers which give success to a college student are just the same as those which give success to the manufacturer or the merchant." Hall raised concerns that some students may become disenchanted by a narrow curriculum. He argued for a broader curriculum that included vocational coursework with the ideal of "fitting for life, which is a very different thing than fitting for college."<sup>57</sup> These two views find expression 100 years later.

Current education reforms in Texas hold that "fitting for life" requires that all students receive the college preparatory curriculum. Advocates of a uniform college preparatory curriculum argue that the skills required for entry-level college coursework are the same skills that students will need in order to pursue careers, military service, or advanced training upon graduation. Others argue that "fitting for life" is not a one-size-fits-all proposition. They question

the effects of expanding the high school curriculum to include more academic coursework and note that corresponding reductions in career preparation programs may discourage some students with different educational goals (such as a desire to enter the workforce first before entering a college or university). Still others hold that improvements to the written curriculum will do little to improve the rigor of the high school coursework until issues of teacher quality are addressed.

While differences of opinion persist, most stakeholders interviewed for this project agree that Texas has made great strides in improving the academic preparation of its students. Many efforts are still unfolding, and more improvement is expected. The state has introduced a more rigorous high school curriculum and made it the standard for all students. It has expanded access to college-level coursework for high school

*Current education reforms in Texas hold that "fitting for life" requires that all students receive college preparatory curriculum... Others argue that "fitting for life" is not a one-size-fits-all proposition.*



<sup>57</sup>G. Stanley Hall, "How Far is the Present High School and Early College Training Adapted to the Nature and Needs of Adolescents?" *School Review*, vol. 9, no. 9 (November 1901).

students and has begun to align high school curricula with college expectations. Also, policymakers have begun to identify career and technical education programs that are as rigorous as the traditional high school curriculum.



But to achieve the goal of “college and workforce readiness,” educators and policymakers must do more. Research consistently shows that teacher quality has the greatest impact on student learning. Therefore, the state should ensure that traditional and alternative teacher certification programs are preparing teachers with the knowledge and skills they need to help students meet the demands of higher education and the workforce. College and career counseling must be more readily available to students, especially in schools with high populations of students who are historically under-represented in higher education. Additionally, the state must invest in the creation of a longitudinal system to help educators in public and higher education institutions understand the relationship between teaching, learning, outcomes, and post-secondary preparedness. Finally, labor market representatives should be involved earlier in the process of developing curricula standards for public and higher education courses, and course offerings should be aligned with workforce needs.

## INTERVIEW SUBJECTS

The Texas Center for Educational Research (TCER) interviewed a wide range of policymakers and educational practitioners involved in college and workforce readiness in Texas. Interviews focused on the barriers to implementing college and workforce readiness initiatives as well as strategies for overcoming these barriers. Interview respondents included:

Dr. Robert Aguero, Vice Chancellor for Learning Support Services, Tarrant County College

Chris Barbic, Founder, YES Prep Public Schools

Pat Bubb, Executive Director, Tech Prep of the Rio Grande Valley, Inc.

Joel Castro, Principal, East Early College High School, Houston ISD

Linda Clarke, Director of Education and Special Projects, Office of the Mayor, Houston, Texas

Jean Cokins, Counselor, Cypress-Fairbanks ISD, Immediate Past President of the Texas Counseling Association

Ronald Congleton, Commissioner Representing Labor, Texas Workforce Commission

Susan Dawson, Executive Director, E3 Alliance

Holly Eaton, Director of Professional Development and Advocacy, Texas Classroom Teachers Association

Mike Feinberg, Co-founder, KIPP Charter Schools

John Fitzpatrick, Executive Director, Texas High School Project

Rich Froeschle, Deputy Director of Labor Market and Career Information, Texas Workforce Commission

Alma Garcia, Program Officer for Early College High Schools, Texas High School Project

Dr. Karen Garza, Chief Academic Officer, Houston ISD

Daniel Girard, Principal, Akins High School, Austin ISD (restructured high school)



Jo Ann Gonzales, Chief Operations Officer, IDEA Public Schools

Linda Holcombe, Executive Director, Texas Industrial Vocational Association

Larry Jones, Director of Workforce Development, Texas Workforce Commission

Ronald Lehman, Commissioner Representing Labor, Texas Workforce Commission

Dr. Barbara Lerner, Coordinator of P–16 Initiatives, Texas Woman's University

Tom Leyden, Associate Executive Director, Texas Association of Secondary School Principals

Erica Lopez, Director of P–16 College and Career Readiness Initiatives, Houston ISD

Dr. Sandy Maddox, Deputy Executive Director, Region 10 ESC

Cesar Maldonado, Board President, Harlingen CISD

Dr. Don McAdams, President, Center for Reform of School Systems

Archie McAfee, Executive Director, Texas Association of Secondary School Principals

Dr. Virginia Miller, Principal, Los Fresnos High School, Los Fresnos CISD

Shannon Milum, Executive Director for Academics, Los Fresnos CISD

Dr. Mike Moses, Former Commissioner of Education; Director of Special Projects, Plains Capital Corporation

Matt Orem, Director of College Access Initiatives, Institute for Public School Initiatives, The University of Texas System

Dr. Raymund Paredes, Commissioner of Higher Education, Texas Higher Education Coordinating Board

Tom Pauken, Chairman, Texas Workforce Commission

Dr. Eileen Reed, Deputy Executive Director, Region 13 ESC

Laurie Rich, Special Industry Cluster Initiatives, Office of the Governor

Dr. Claudia Rodriguez, Administrator, Secondary School Initiatives, Region 1 ESC

Robert Scott, Commissioner of Education, Texas Education Agency

Dr. Ana Tilton, Chief Program Officer, Texas High School Project

Dr. Marina Walne, Executive Director, Institute for Public School Initiatives, The University of Texas System

Cheryl Zaremba, Attorney for the Texas Workforce Commission

Dr. Heather Zavadsky, Director of Policy and Communication, Institute for Public School Initiatives, The University of Texas System





## GLOSSARY

This glossary is provided to identify acronyms and other abbreviated terms referenced throughout this report.

**ACT:** college testing program

**ADA:** average daily attendance

**AEIS:** Academic Excellence Indicator System

**AP:** Advanced Placement

**CCRT:** Commission for a College Ready Texas

**CTE:** career and technology education

**DAP:** Distinguished Achievement Program

**ELA:** English language arts

**FERPA:** Family Educational Rights and Privacy Act

**4x4:** requirement of RHSP in Texas for four years of science and four years of math

**GED:** General Educational Development

**GPA:** grade point average

**HB:** House Bill

**HSCSI:** High School Completion and Success Initiative

**IB:** International Baccalaureate

**P–16 Council:** The Texas P–16 Council is tasked to ensure that long-range plans and education programs complement the entire system of public education, encompassing pre-kindergarten through four-year college programs.

**RHSP:** Recommended High School Program

**SAT:** college testing program

**SB:** Senate Bill

**SBOE:** State Board of Education

**TAKS:** Texas Assessment of Knowledge and Skills

**TASB:** Texas Association of School Boards

**TCER:** Texas Center for Educational Research

**TEA:** Texas Education Agency

**TEKS:** Texas Essential Knowledge and Skills

**THEA:** Texas Higher Education Assessment

**THECB:** Texas Higher Education Coordinating Board

**THSP:** Texas High School Project

**TSI:** Texas Success Initiative



